

Statistics Norway
Departement of Social Statistics

*Arne Andersen, Tor Morten Normann
and Elisabeth Ugreninov*

**Intermediate Quality Report
EU-SILC-2003. Norway**

Documents

Preface

This report is a documentation of the Survey on Income and Living Conditions (EU-SILC) for 2003. The survey was carried out by Statistics Norway from 24 February to 15 July. The topics covered by the report are the same for all participating countries in order to have a comparable review of the quality of the surveys in these countries. Arne Andersen has edited the report and was responsible for chapter 1 and 2.1.8. Trond Ydersbond made the weightings in 2.1.8. Tor Morten Normann was responsible for 2.1, 2.2 and 2.5, Elisabeth Ugreninov for 2.3, 2.4 and 3.1 and Jon Epland for 3.2.

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1. Common cross-sectional European Union indicators

1.1. Common cross-sectional European Union indicators based on the cross-sectional component of EU-SILC

Primary Laeken indicators of social cohesion

1.a At-risk-of-poverty rate after social transfers (60%) by age and gender. All persons

	Under 16 years	16-24 years	25-49 years	50-64 years	65 years and over	16 years and over	16-64 years	All ages
Males			23,9	7,9	2,8	12,4	9,9	9,4
Females			29,7	6,7	4,8	28,0	13,8	10,0
All	8,4	26,4	7,3	3,8	21,6	11,9	9,7	11,1

1.b. At-risk-of-poverty rate after social transfers (60%) by most frequent activity and gender. Persons 16 years and over

	Employed	Unemployed	Other inactive	All (including missing)	All
Males	4,4	26,4	18,6	9,9	9,5
Females	4,8	16,5	24,0	9,6	12,7
All	4,6	22,4	21,8	9,8	11,1

1.c At-risk-of-poverty rate after social transfers (60%) by household type. All persons

One person, under 64 years	27,5
One person, 65 years and over	36,7
One person, male	24,5
One person, female	35,8
One person households, total	30,4
Two adults under 65 years, no dependent children	5,5
Two adults, other, no dependent children	10,3
Other households without dependent children	2,3
Single parent households with dependent children	21,1
Two adults, one dependent child	5,1
Two adults, two dependent children	3,2
Two adults, three or more dependent children	8,7
Other households with dependent children	5,8
Households without dependent children	15,0
Households with dependent children	7,1

1.d. At-risk-of-poverty rate by accommodation tenure status. All persons

Owner or rent free	7,1
Tenant	33,4
All	10,9

1.e. At-risk-of-poverty threshold (illustrative values)

One person household 123782 NOK
Two adults and two children-hpusehold 259942 MOK

2. S80/S20 income quintile share ratio

3,8

3. Relative median at-risk-of-poverty gap by age and gender

	Under 16 years	16-64 years	65 years and over	16 years and over	
Males			27,7	10,5	21,7
Females			21,6	11,3	15,8
All	14,3		24,1	11,2	17,7

Secondary Laeken Indicators of social cohesion

4.1 Risk-of-poverty-rate with different thresholds

40 %	2,8
50 %	5,7
60 %	11,1
70 %	18,3

5. At-risk-of-poverty rate before social transfers (60%)

	Per cent
Excluding old-age and survivors benefits	18,8
Including old-age and survivors benefits	29,2

6. Inequality of income distribution: Gini coefficient

0,267

1.2. Other indicators

7. Equivalised disposable income. Average per person

231895 NOK

2.0 Accuracy

2.1 Sampling design

2.1.1 Type of sampling

The sample for EU-SILC in Norway is composed of the sample for an existing panel established in 1997, using a specific sampling design, and a new sample with a different design in 2003. Hence two different types of sampling are used in the Norwegian EU-SILC 2003.

The old sample used systematically random sampling in two stages. In the first stage primary sample areas were drawn to establish a sampling frame for face-to-face interviews (Statistics Norway's standard sampling frame). Sample areas were stratified (see 2.1.3). In the second stage, respondents were drawn with a probability designed to make the sample self-weighting, i.e. all persons in the in the sampling frame have the same probability of selection (see also 2.1.5). The primary sampling units are not clustered.

When drawing the new sample, systematically random sampling in one stage was used. The systematic element stems from the stratification (see 2.1.3) and arrangement of the population register.

2.1.2 Sampling units

In the new part of the sample, the sample units are persons aged 16 years or more registered in the central population register (inhabitants). In the old part of the sample, primary sampling units are municipalities or groups of municipalities from the different strata in the sampling frame (see also 2.1.3.). Secondary sampling units are persons aged 16 years or more registered in the central population register.

2.1.3 Stratification and sub-stratification criteria

The old part of the sample: In the standard sampling frame for face-to-face interviews, the country is first divided into a number of primary sampling areas and these again are divided into 109 subpopulations, called strata. The criteria for stratification of primary sampling areas are economic classification¹, population density, centrality and a prognoses classification². The aim is to create strata, which are as homogenous as possible, but still geographically concentrated. The primary sampling units are municipalities or a group of municipalities. Municipalities with few inhabitants are grouped together with other municipalities to ensure that each sampling area consists of at least 7 per cent of the total inhabitants in the stratum the unit belongs to. In some cases small municipalities close to highly populated municipalities are put together with the large one in that region. All municipalities with more than 30 000 inhabitants and some with 25 000 to 30 000 inhabitants make separate strata. In the first stage, one primary sampling area from each stratum was drawn. In the second stage, the respondents were drawn from a population register. Before the actual drawing of units the register was also arranged by family number and personal code within the family. This was done to avoid that two or more persons within the same household was selected in the sample.

¹ Classification of municipalities following the Population and housing census in 1990 (FoB90). Based on the nature of industry in each municipality.

² This classification is based on data on commutation, newspaper coverage, communications, commerce and districts for unemployment offices (Statistics Norway 1984).

The new part of the sample: The primary stratification criterion for the sample is age. The design chosen implicates that age is the central criterion for representativity. The sample is drawn as a proportion p of the population within one-year groups. In addition, the population register was arranged to ensure geographical representativity. This was done by municipality and postal codes. As in the old part of the sample, the register was also arranged by family number and personal code within the family before the actual drawing of units.

2.1.4 Sample size and allocation criteria

The selected sample size set to meet demands for minimum effective sample size of both the cross-sectional and the longitudinal survey over time is 8 500 persons, each representing one separate household. In 2003 (t) 8 500 persons constituted a proportion $p \approx 0,0024$ of the total population (inhabitants aged 16 years or more). This proportion is meant to be identical each year of the survey, and thus the size of the gross sample will change according to changes in the population. When the actual sample was drawn, round off of number of sample persons in each age group gave a drawn sample of 8 508 persons. During the field period, 242 of these proved to be non-eligible (either dead or emigrated), thus giving a gross sample of 8 266 persons. We succeeded in interviewing 5 866 of these (net sample), a response rate of 71,0 percent.

In all households interviewed there were 11 709 persons aged 16 years or more. The minimum sample size set by Eurostat for the cross sectional components was 3750 households and 6250 persons. The effective sample size is: Net sample / design effect for equivalent income. The design effect for equivalent income is estimated to be 1,039. In the Norwegian 2003 survey this gives an achieved effective sample size of 5 646 households and 11 270 persons.

The selected sample size by rotational groups, referring to selected respondent (household), can be seen in table 2.1 below.

2.1.5 Sample selection schemes

As mentioned the sample for the Norwegian EU-SILC 2003 consists of an existing sample for a longitudinal survey on Living conditions started in 1997, and of a new part drawn to implement the sampling plan for EU-SILC.

When establishing a sample for the longitudinal survey on living conditions in 1997, a main goal was to establish a link to the Population and housing census in 1990 (FoB90), and to prior population and housing censuses. This link was established by drawing a "supersample" from FoB90, using this as the basis for drawing units for the sample. From this "supersample", a self-weighting stratified sample of 5 000 persons aged 16-79 was drawn, using Statistics Norway's sample plan for face-to-face interviews. In the following years, this sample was supplemented with 16-years olds, and new immigrants to maintain the cross sectional qualities of the sample. This "old sample" was a systematically random sample, drawn in two steps, but in such a way that all persons had the same probability of selection (self weighting).

In EU-SILC, the link to FoB90 was no longer of importance, neither was the use of Statistics Norway's sample plan, since EU-SILC is conducted by telephone interviewing. The new sample plan for EU-SILC meant systematically random sampling in one step, and no upper age limit. The age-representativity criterion implicates unequal probabilities, but this should not be a problem as long as representativity is ensured. The new sample is drawn in one step from the database BEBAS, which is a monthly updated copy of the Norwegian population register.

Before adding the new part of the sample, drawn in accordance to the new sample plan, the old sample was supplemented with persons aged 80 or more in 1997, using the old two-step sampling and the FoB90 "supersample". The old sample then consisted of 5 309 persons, and on basis of how many there were in each one-year age group, the number needed in the new sample, drawn in accordance to the new sample plan, was estimated. The number in each age group was estimated by $p * \text{number in population and then subtracting the number in the old sample}$. A total of 3 199 persons were drawn and added to the existing 5 309, giving a total of 8 508.

2.1.6 Sample distribution over time

To make the data collection effective, and to ensure a highest possible response rate among the new respondents in the sample, the sample was divided in to four periodical groups with different start of the interviewing but similar end of interviewing. The periodical groups were based on rotational groups. Referring to table 2.1, periodical group 1 with start of interviewing 24 February was made up of rotational groups 7 and 8. Periodical group 2 with start of interviewing 17 March was made up of rotational groups 5 and 6. Periodical group 3 with start of interviewing 3 April was made up of rotational groups 3 and 4, and finally; periodical group 4 with start of interviewing 25 april was made up of rotational groups 1 and 2. Interviewing of all groups should end 30 June.

2.1.7 Renewal of sample: Rotational groups

In the Norwegian design, each respondent (sample unit) is part of the sample in eight years. Each year 1/8 of the sample will be replaced. In a period of transition from the old to the new design, some respondents in the old sample will be a part of the sample for eleven years, while some will be a part of the sample for only six years.

Approximately 1 060 - 1 070 persons will constitute one rotational group. In 2003 the groups were constituted as shown in table 2.1

Table 2.1

Rotational group	N	Drawn according to...	Last year in sample
Group 1	1062	Old design	2003
Group 2	1062	Old design	2004
Group 3	1062	Old design	2005
Group 4	1062	Old design	2006
Group 5	1061	Old design	2007
Group 6	1067	New design	2008
Group 7	1066	New design	2009
Group 8	1066	New design	2010

The chosen design, where representativity by age and an eight years rotation, will in time mean that each new group of replacements will be composed largely of persons aged 16, 24, 32, 40, 48 etc. The sample as a whole will maintain its cross sectional qualities, but each rotational group will not have such qualities.

2.1.8. Weightings

2.1.8.1. Design factor

In the sample persons aged 16 years and over are selected. Hence the probability of selected a household is equal to the number of persons aged 16 and over in the household. The design factor for households and for all adult household members is the inverse of the number of adult household members.

2.1.8.2. Non-response adjustments

PB060: Personal cross-sectional weight for selected respondent

The probability of selection is the same for all selected respondents. Weights are only calculated to take into account non-response. Results are not calibrated to external sources.

Weights are calculated by stratifying the gross sample into strata. The gross sample and net sample are stratified according to information in registers on sex, age group, education and family size. There are five categories of age: 16-24 years, 25-44 years, 45-66 years 67-79 years and 80 years and over. There are five categories of education : lower secondary and lower; upper secondary; post-secondary but non-tertiary; tertiary; missing information. There are also five categories for family size: 1, 2, 3, 4 and 5 and more persons.

DB090: Household cross-sectional weight

This is constructed as the household design weight (DB080) times the personal cross-sectional weight for the selected person (PB060).

The household design weight is the inverse of the number of persons 16 years and older in the household (age is age per 31.12.2002).

RB050: Personal cross-sectional weight

RB050 is equal to DB090.

PB040: Personal cross-sectional weight for all household members aged 16 and over

PB040 is equal to DB090.

RL070: Children cross-sectional weight

The weights are calculated as the number of children in each one-year group (0-12 years) in the population divided by the number of children in one-year groups in the households interviewed.

2.1.8.3. Adjustments to external data

No adjustments are made, except for children's weights.

2.1.9. Substitutions

There are no substitutions in EU-SILC Norway.

2.2 Sampling errors

2.1. Standard errors and effective sample size

As we understand it standard errors will be calculated in Eurostat.

Effective sample size is treated in 2.1.4.

2.3 Non-sampling errors

2.3.1 Sampling frame and coverage errors

In this survey, two separate samples with two separate sampling frames were joint together. In the old part of the sample, the sample frame is a register of participants in the Population and housing census in 1990 (FoB90), living in the selected sample areas. This register is annually updated with information from the central population register. There are two kinds of possible coverage errors in this frame. The first is the exclusion of all those living in areas outside the sampling frame, the second is the exclusion of those not participating in FoB90. Both sources are assumed to be minimal. The first one because the selected areas are representative of their stratum, the second one because all inhabitants were obliged to participate in FoB90. To avoid under-coverage of immigrants in the years following 1997, the sample was supplemented with new immigrants each following year.

In the new part of the sample, the sampling frame is a copy of the central population register called BEBAS. This register is monthly updated with information from local population register offices. There should be no coverage errors connected to this frame, except for the extremely few cases of emigrations which are wrongly coded as non-response instead of non-eligible because their emigration were not registered in the population register. Table 2 in section 2.3.3.3. shows that 37 persons could not be contacted because they were living at an address that was unknown. This is the maximum number of persons that could be ineligible because they have emigrated.

Over-coverage due to deaths and emigration between updating of the sampling frame and the interview is almost always discovered during the fieldwork.

Under-coverage due to immigration between the updating of the sampling frame and interview is small. This is partly because immigration is relatively small (35 000 in 2003, of whom 10 000 were Norwegian citizens), and partly because the new sampling frame is updated very frequently.

2.3.2 Measurement and processing errors

In every survey there are various sources of both measurement and processing errors. Measurement errors occur in different phases and for different reasons. These reasons can be divided into five sub-groups: Information system, setting/environment, mode of data collection, the respondent, the interview and finally the instrument. We will concentrate on the sources most likely to be found in this survey, and they are classified under respondent, the interview and the instrument.

In every survey there is a chance of respondents giving an incorrect answer. The question/answer process can be seen in four different phases. First there is the understanding and interpretation of the actual question. If there are difficult terms or complicated wording, this may cause errors. In EU-SILC, the questions regarding inter-household transfers may be subject to this kind of errors because of the understanding of inter-household transfer and the term regular.

The second phase is where the respondent recalls information. Errors in this phase may be caused if the information necessary is hard to retrieve because it is old, complicated or not available to the respondent. In EU-SILC some of the questions about housing costs are quite complicated even for the person responsible for the apartment, and this may affect the accuracy of the answers given. Apart from this, we have no suspicion of frequent errors caused by difficulties in information retrieval.

The third phase is evaluating and selecting the information necessary to answer the question. In this phase, the respondent may actually have the right kind of information to answer the question correctly, but still end up with a wrong answer. This type of error is most frequent when the question is complicated and requires much information. Typical questions from EU-SILC may be questions requiring the respondent to select different economic components necessary for a specific question. Again the questions regarding inter-household transfers may be mentioned, but also the subjective evaluation of how difficult it is "to make ends meet", where the respondent has to choose which components to include in income.

The fourth and final phase is the actual formulating of the answer. This may cause errors if the respondents mastering of the language in use is weak, if the answer requires use of complicated terms or if the communication between the interviewer and the respondent is not optimal.

Measurement errors under the label "interview" are first effects of the data collection mode. In EU-SILC, all interviews are conducted by telephone. The interview is quite short, and the questionnaire is composed to avoid question requiring visual aids. We therefore believe that errors caused by mode are minimal.

Interviewer effects may also be labelled under errors caused by interview. The interviewers used in EU-SILC were approximately 130 of the ordinary interviewer staff assigned to Statistics Norway. These interviewers are part time employees with individual agreements ranging from 500 to 1200 hours of work per year. The interviewers are locally based, stationed in the sample areas according to the standard sampling frame. When hired, all interviewers must complete an education consisting of self-studies and written tasks in two stages. Then, all are gathered to an obligatory three-day course before they are hired for a trial period of 6 months. Before the end of the trial period and permanent hiring, all new interviewers are given a personal follow-up talk. As part of the general follow-up and education of interviewers, telephone conferences are held on occasion.

The specific training for EU-SILC consists of an obligatory instruction following the survey. This instruction contains information about the survey, description of the sample, time limits (start and end) and a mentioning and instructions for some of the questions. All interviewers are paid to read this instruction. In addition, they are paid a fixed price (estimated number of hours) for test-interviewing before starting the actual work. In EU-SILC 2003, the estimated time destined to reading of instruction and training was 3 hours per interviewer. As a part of the follow-up and continuous training of interviewers, a telephone conference where interviewers with relatively poor results took part was arranged. The aim was to improve their results through motivation and advises.

The danger of systematic interviewer effects is reduced through training, but also by using a relatively large number of interviewers. 112 interviewers worked on the Norwegian survey.

The number of interviews per interviewer ranged from 13 to 124. Any systematic error done by a single interviewer should therefore not affect the data in any significant way.

The questionnaire may also be the cause of measurement errors. We have tried to build a questionnaire according to the recommendations of Eurostat. In cases where EU-SILC variables and variables which are standard in our national surveys are close, we have preferred to use the national standards which are well tested. We shall comment on these variables and other cases where there might be deviations from Eurostat standards.

HH010

The standard Norwegian question is much more detailed, but most categories are easily translated to Eurostat categories. To construct the Eurostat categories we added a question on number of apartments/flats in the building.

HH030

Only rooms which are at least 6 sqm are counted. The consequences for comparability are very small.

HH090

'For the sole use of the household' is not included in the Norwegian questionnaire. If one or more rooms are hired out we have added a question if this/these persons have their own WC. If not the household do not have a flushing toilet for sole use.

HH040

We have split this question in two: Rot in windows or floor and Leaking roof, damp walls or floor.

HS160

The Norwegian question asks 'not enough **daylight**'.

HH020 The Norwegian question is more detailed. However it is quite clear how to aggregate categories to construct the Eurostat categories of owners and tenants. To distinguish between tenants paying rent at or below market price we asked whether the rent that is paid is market rent (question Husleie2). To distinguish household with a rent-free accommodation we asked whether the household pay rent (question Husleie1).

HY130G

The Norwegian question differs because it excludes alimonies to former spouse/children. Information on alimonies is taken from register. HY130 is therefore calculated as a sum of information from register and from interview.

HH070

When asking about interest on mortgage the respondents can choose whether they will report the amount per year, quarter or month. There are some cases where we suspect that period and amount do not correspond, maybe due to interviewer errors. We have not tried to correct these cases. Interest on mortgage is gross, not net of tax relief. For tenants rent payments are gross, not net of housing benefits.

HH080G

The same as for HY130G. HY080 is calculated as a sum of information from register and from interview.

PL030

The only difference is that the Norwegian question is only asked respondents working less than 32 hours a week. Persons working 32 hours or more a week is considered as 'carrying out a job or profession'. The interviewer reads the categories.

PL020A-E

The questions on ways of looking for a job are asked by those who attempted to find a job during the last four weeks (or more precisely since a date four weeks before the date of the interview). Persons who are unemployed according to PL030 but not looking for work during the last four weeks are by a mistake not asked this question. Hence missing is quite high.

PL110

We ask for the name and address of the firm. Industry is coded from register information on the firm.

PL060

The question explicitly mentions that paid overtime and extra work at home shall be included.

PH020

In addition to chronic illness the question mentions 'any consequence of injury or any disability'.

PH030

This variable is built on three questions to ensure that all the information needed for the variable is of good quality.

- 1: ' Does this (chronic illness) lead to limitations in your daily activities'
- 2: ' Have these limitations lasted for at least six months'
- 3: ' Would you say that you are strongly limited or somewhat limited'?

PE010

This variable combines information from interview and register. A person is considered as in education if he/she is in education according to PL030 (=3) or if they are in education according to register information.

PE020

This information is taken from register. The register information is per 1 October 2002. Some may have started in education after this date. Hence missing is relatively high (7 per cent of all persons with current education activity). The better quality of information on educational level from register in our opinion justify the use of register instead of interview.

PE030

To get information of good quality this question was split into four questions.

- 1: ' Have you got any education in addition to the obligatory'?
- 2: ' Have you interrupted this education because of work or birth/childcare'?

3 (if yes): ' How old were you when you interrupted the education the first time because of work or birth/childcare'?

4 (if no): ' How old were you when you finished education '?

In connection to the 2003 data collection, no specific field testing of the questionnaire was done. The questionnaire was by large the same as in the pilot survey conducted in June 2002, and our opinion was that further field testing was unnecessary. Before finalising the questionnaire it was submitted to a structured interviewer test, where three experienced interviewers tested by pre-defined profiles. In cases where EU-SILC variables and standard variables in our surveys are close we have used the national standards which are well tested.

2.3.2.2. Processing errors

The data collection mode in the Norwegian EU-SILC is CATI, using the interview programme Blaise developed in the Netherlands. Data entry controls are built into the electronic questionnaire, and there is less need for post data control. Control of data in the programme is done in different ways.

Firstly, all selections are done automatically by the programme, thus reducing the risk of errors in the selections done by interviewers. This also reduces the number of signals and checks necessary. Secondly, all numeric variables have absolute limits for data entry, for example when entering the number of hours worked per week it is impossible to enter numbers above 168. Thirdly, and similarly, there are built inn checks (hard error), which it is impossible to override. An obvious example is that year and date of birth is checked against the date of the interview. Fourthly, and lastly, there are signals (soft error) which give a warning to the interviewer if the answer is either unlikely because it is extreme or because it does not correspond to answers given to questions asked earlier. These signals can be overridden if the answer in question is confirmed.

Examples of signals, checks and value limits for the target variables are given in table 2.3. For an overview of filters in the questionnaire we refer to the written questionnaire. No errors of any importance have been detected in the post data-collection process except some confusion on id for household members where we need to programme a wider range of signals and checks. This error only occurs for persons who are not members of the household according to the population register. For mother, father or spouse id is assigned automatically based on kinship from register.

Table 2.3 Signals, checks and value limits for target variables

Variable	Description	SIGNAL (Soft error)	CHECK (Hard error)	Value
RB070	Month of birth	AGE <= 105	DATE <= TODATE	
RB080	Year of birth	AGE <= 105	DATE <= TODATE	
RB210	Basic activity status	IF RB210=3 AND AGE < 50		
RB220	Father id		NOT RB030	
RB230	Mother id		NOT RB030	
RB240	Spouse/partner id		NOT RB030	
PB130	Month of birth	AGE <= 105	DATE <= TODATE	
PB140	Year of birth	AGE <= 105	DATE <= TODATE	
PB160	Father id		NOT PB030	
PB170	Mother id		NOT PB030	
PB180	Spouse/partner id		NOT PB030	
PE030	Age completed initial education	<= 13	> AGE	12..80
PL030	Self-defined currentactivity status	IF PL030 = 4 AND AGE < 50 IF PL030 = 6 AND AGE > 30		
PL060	Number of hours usually worked per week in main job	>= 70		0..168
PL100	Total number of hours usually worked in second, third... jobs	>=40 PL100+PL060>=100		0..168
PY200G	Gross monthly earnings for employees	Hourly NOT [40..500] Weekly NOT [100..700] "Fortnightly" NOT [100.20000] Monthly NOT [100..50000] Yearly NOT [10000..800000]		
HY080G	Regular inter-household cash transfer received			0..999997
HY130G	Gross regular inter-household cash transfer paid			0..999997
HH030	Number of rooms available to household			0..50
HH031	Year of contract or purchasing or installation			1900..2003
HH060	Current rent related to occupied dwelling, if any	Monthly NOT [500..10000] Quarterly NOT [1500..30000] Yearly NOT [6000..120000]		
HH061	Subjective rent related to non-tenant paying rent at market price	>= 15000		0..99997
HH062	Estimated selling price of dwelling	NOT [100000..5000000]		0..99999997

Professional coders at Statistics Norway, who also do the coding in the Labour force survey, do coding of occupation and industry. The coding is based on information from the interview, but also with support from registers. Industry is coded from information on the

workplace's name and address. This is in most cases gathered from register (for the selected respondents) in advance of the interview. If the respondent confirms this information, no post-interview coding is necessary. Income is also gathered from register, so no editing is necessary.

2.3.3 Non-response errors

2.3.3.1 Achieved sample size

- In our database there are 5852 households that have completed an interview that is accepted.
- In our database there are 11 635 persons who are 16 years or older and are members of households that have completed an interview that is accepted.
- In our database there are 5852 selected respondents who are members of households that have completed an interview that is accepted.

2.3.3.2. Unit non-response

Ra is: $\frac{8229}{8266} = 1.0$

Rh is: $\frac{5852}{8229} = 0.71$

Rp is: $\frac{11635}{11719} = 0.99$

Individual non-response rates, NRp is: $(1-0.99)*100=1$

Overall individual non-response rates (*NRp) are: $(1-(Ra*Rh*Rp))*100=29.7$

2.3.3.3 Distribution of household.

Table 2.3.3.3.1. Distribution of original units by record of contact at address. Total.

	Number	Percentage
Total (DB120=11 to 23)	8266	100
Address contacted (DB120=11)	8229	99.6
Address non-contacted (DB120=21 to 23)	37	0.4
Total address non-contacted (DB120=21 to 23)	37	100
Address can not be located (DB120=21)	37	100
Address unable to access (DB120=22)	-	
Address does not exists or in non residential address or is unoccupied or not principal residence (DB120=23)	-	

Table 2.3.3.3.1a. Distribution of original units by record of contact at address.
Rotation group 1.

	Number	Percentage
Total (DB120=11 to 23)	1036	100
Address contacted (DB120=11)	1032	99.6
Address non-contacted (DB120=21 to 23)	4	0.4
Total address non-contacted (DB120=21 to 23)	4	100
Address can not be located (DB120=21)	4	100
Address unable to access (DB120=22)	-	
Address does not exist or in non residential address or is unoccupied or not principal residence (DB120=23)	-	

Table 2.3.3.3.1b. Distribution of original units by record of contact at address.
Rotation group 2.

	Number	Percentage
Total (DB120=11 to 23)	1035	100
Address contacted (DB120=11)	1032	99.3
Address non-contacted (DB120=21 to 23)	7	0.7
Total address non-contacted (DB120=21 to 23)	7	100
Address can not be located (DB120=21)	7	100
Address unable to access (DB120=22)	-	
Address does not exist or in non residential address or is unoccupied or not principal residence (DB120=23)	-	

Table 2.3.3.3.1c. Distribution of original units by record of contact at address.
Rotation group 3.

	Number	Percentage
Total (DB120=11 to 23)	1031	100
Address contacted (DB120=11)	1028	99.7
Address non-contacted (DB120=21 to 23)	3	0.3
Total address non-contacted (DB120=21 to 23)	3	100
Address can not be located (DB120=21)	3	100
Address unable to access (DB120=22)	-	
Address does not exist or in non residential address or is unoccupied or not principal residence (DB120=23)	-	

Table 2.3.3.3.1d. Distribution of original units by record of contact at address.
Rotation group 4.

	Number	Percentage
Total (DB120=11 to 23)	1038	100
Address contacted (DB120=11)	1036	99.8
Address non-contacted (DB120=21 to 23)	2	0.2
Total address non-contacted (DB120=21 to 23)	2	100
Address can not be located (DB120=21)	2	100
Address unable to access (DB120=22)	-	
Address does not exist or in non residential address or is unoccupied or not principal residence (DB120=23)	-	

Table 2.3.3.3.1e. Distribution of original units by record of contact at address.
Rotation group 5.

	Number	Percentage
Total (DB120=11 to 23)	1012	100
Address contacted (DB120=11)	1006	99.4
Address non-contacted (DB120=21 to 23)	6	0.6
Total address non-contacted (DB120=21 to 23)	6	100
Address can not be located (DB120=21)	6	100
Address unable to access (DB120=22)	-	
Address does not exist or in non residential address or is unoccupied or not principal residence (DB120=23)	-	

Table 2.3.3.3.1f. Distribution of original units by record of contact at address.
Rotation group 6.

	Number	Percentage
Total (DB120=11 to 23)	1039	100
Address contacted (DB120=11)	1034	99.5
Address non-contacted (DB120=21 to 23)	5	0.5
Total address non-contacted (DB120=21 to 23)	5	100
Address can not be located (DB120=21)	5	100
Address unable to access (DB120=22)	-	
Address does not exist or in non residential address or is unoccupied or not principal residence (DB120=23)	-	

Table 2.3.3.3.1g. Distribution of original units by record of contact at address.
Rotation group 7.

	Number	Percentage
Total (DB120=11 to 23)	1039	100
Address contacted (DB120=11)	1035	99.6
Address non-contacted (DB120=21 to 23)	4	0.4
Total address non-contacted (DB120=21 to 23)	4	100
Address can not be located (DB120=21)	4	100
Address unable to access (DB120=22)	-	
Address does not exist or is non residential address or is unoccupied or not principal residence (DB120=23)	-	

Table 2.3.3.3.1h. Distribution of original units by record of contact at address.
Rotation group 8.

	Number	Percentage
Total (DB120=11 to 23)	1036	100
Address contacted (DB120=11)	1030	99.4
Address non-contacted (DB120=21 to 23)	6	0.6
Total address non-contacted (DB120=21 to 23)	6	100
Address can not be located (DB120=21)	6	100
Address unable to access (DB120=22)	-	
Address does not exist or is non residential address or is unoccupied or not principal residence (DB120=23)	-	

Table 2.3.3.3.2. Distribution of address contacted by household questionnaire result and by household interview acceptance. Total.

	Number	Percentage
Total	8266	100
Household questionnaire completed (DB130=11)	5866	71
Interview not completed (DB130=21 to 24)	2363	29
Total interview not completed (DB130=21 to 24)	2363	100
Refusal to co-operate (DB130=21)	1642	69
Entire household temporarily away for duration of fieldwork (DB130=22)	447	19
Household unable to respond (illness, incapacity, etc) (DB130=23)	241	10
Other reason	33	1
Household questionnaire completed (DB135=1+2)	5866	100
Interview accepted for data base (DB135=1)	5852	99.8
Interview rejected (DB135=2)	14	0.2

Table 2.3.3.3.2a. Distribution of address contacted by household questionnaire result and by household interview acceptance. Rotation group 1.

	Number	Percentage
Total	1032	100
Household questionnaire completed (DB130=11)	727	70.5
Interview not completed (DB130=21 to 24)	305	29.6
Total interview not completed (DB130=21 to 24)	305	100
Refusal to co-operate (DB130=21)	202	66.2
Entire household temporarily away for duration of fieldwork (DB130=22)	81	26.6
Household unable to respond (illness, incapacity, etc) (DB130=23)	17	5.6
Other reason	5	1.6
Household questionnaire completed (DB135=1+2)	728	100
Interview accepted for data base (DB135=1)	727	99.9
Interview rejected (DB135=2)	1	0.1

Table 2.3.3.3.2b. Distribution of address contacted by household questionnaire result and by household interview acceptance. Rotation group 2.

	Number	Percentage
Total	1028	100
Household questionnaire completed (DB130=11)	730	71
Interview not completed (DB130=21 to 24)	298	29
Total interview not completed (DB130=21 to 24)	298	100
Refusal to co-operate (DB130=21)	219	73.5
Entirely household temporarily away for duration of fieldwork (DB130=22)	52	17.4
Household unable to respond (illness, incapacity, etc) (DB130=23)	23	7.7
Other reason	4	1.3
Household questionnaire completed (DB135=1+2)	731	100
Interview accepted for data base (DB135=1)	731	99.9
Interview rejected (DB135=2)	1	0.1

Table 2.3.3.3.2c. Distribution of address contacted by household questionnaire result and by household interview acceptance. Rotation group 3.

	Number	Percentage
Total	1028	100
Household questionnaire completed (DB130=11)	746	72.6
Interview not completed (DB130=21 to 24)	282	27.4
Total interview not completed (DB130=21 to 24)	283	100
Refusal to co-operate (DB130=21)	200	70.7
Entirely household temporarily away for duration of fieldwork (DB130=22)	60	21.2
Household unable to respond (illness, incapacity, etc) (DB130=23)	19	6.7
Other reason	3	1.1
Household questionnaire completed (DB135=1+2)	746	100
Interview accepted for data base (DB135=1)	746	100
Interview rejected (DB135=2)	0	0

Table 2.3.3.3.2d. Distribution of address contacted by household questionnaire result and by household interview acceptance. Rotation group 4.

	Number	Percentage
Total	1036	100
Household questionnaire completed (DB130=11)	740	71.4
Interview not completed (DB130=21 to 24)	296	28.6
Total interview not completed (DB130=21 to 24)	296	100
Refusal to co-operate (DB130=21)	213	72
Entirely household temporarily away for duration of fieldwork (DB130=22)	52	17.6
Household unable to respond (illness, incapacity, etc) (DB130=23)	27	9.1
Other reason	4	1.4
Household questionnaire completed (DB135=1+2)	740	100
Interview accepted for data base (DB135=1)	740	100
Interview rejected (DB135=2)	0	0

Table 2.3.3.3.2e. Distribution of address contacted by household questionnaire result and by household interview acceptance. Rotation group 5.

	Number	Percentage
Total	1006	100
Household questionnaire completed (DB130=11)	736	73.2
Interview not completed (DB130=21 to 24)	270	26.8
Total interview not completed (DB130=21 to 24)	270	100
Refusal to co-operate (DB130=21)	202	74.8
Entirely household temporarily away for duration of fieldwork (DB130=22)	34	12.6
Household unable to respond (illness, incapacity, etc) (DB130=23)	29	10.7
Other reason	5	1.9
Household questionnaire completed (DB135=1+2)	739	100
Interview accepted for data base (DB135=1)	736	99.6
Interview rejected (DB135=2)	3	0.4

Table 2.3.3.3.2f. Distribution of address contacted by household questionnaire result and by household interview acceptance. Rotation group 6.

	Number	Percentage
Total	1034	100
Household questionnaire completed (DB130=11)	730	70.6
Interview not completed (DB130=21 to 24)	304	29.4
Total interview not completed (DB130=21 to 24)	304	100
Refusal to co-operate (DB130=21)	188	61.8
Entirely household temporarily away for duration of fieldwork (DB130=22)	56	18.4
Household unable to respond (illness, incapacity, etc) (DB130=23)	48	15.8
Other reason	12	3.9
Household questionnaire completed (DB135=1+2)	734	100
Interview accepted for data base (DB135=1)	730	99.5
Interview rejected (DB135=2)	4	0.5

Table 2.3.3.3.2g. Distribution of address contacted by household questionnaire result and by household interview acceptance. Rotation group 7.

	Number	Percentage
Total	1035	100
Household questionnaire completed (DB130=11)	716	69.2
Interview not completed (DB130=21 to 24)	319	30.8
Total interview not completed (DB130=21 to 24)	319	100
Refusal to co-operate (DB130=21)	211	66.1
Entirely household temporarily away for duration of fieldwork (DB130=22)	57	17.9
Household unable to respond (illness, incapacity, etc) (DB130=23)	44	13.8
Other reason	7	2.2
Household questionnaire completed (DB135=1+2)	718	100
Interview accepted for data base (DB135=1)	716	99.7
Interview rejected (DB135=2)	2	0.3

Table 2.3.3.3.2h. Distribution of address contacted by household questionnaire result and by household interview acceptance. Rotation group 8.

	Number	Percentage
Total	1030	100
Household questionnaire completed (DB130=11)	727	70.6
Interview not completed (DB130=21 to 24)	303	29.4
Total interview not completed (DB130=21 to 24)	303	100
Refusal to co-operate (DB130=21)	207	68.3
Entirely household temporarily away for duration of fieldwork (DB130=22)	55	18.2
Household unable to respond (illness, incapacity, etc) (DB130=23)	34	11.2
Other reason	7	
Household questionnaire completed (DB135=1+2)	730	100
Interview accepted for data base (DB135=1)	727	99.6
Interview rejected (DB135=2)	3	0.4

2.3.3.5 Item non-response

Table 2.3.3.5.1 Distribution of item non-response.

	(A)	(B)	(C)
	% Of households having received an amount	% Of households with missing values (before imputation)	% Of households with partial information (before imputation)
Total household gross income	100		
Total disposable household income	100		
Total disposable household income before social transfers other than old-age and survivors benefits	100		

	(A)	(B)	(C)
Gross income component at household level	% Of households having received an amount	% Of households with missing values (before imputation)	% Of households with partial information (before imputation)
Gross income from rental of a property or land	2	0	
Family related allowances	29	0	
Social assistance	5	0	
Housing allowances	4	0	
Regular inter-household cash transfer received	11	0	
Gross interest dividends, profit from capital investments in unincorporated business	99	0	
Gross regular inter-household cash transfer paid	12	0	
Tax on income and social contributions	96	0	

	(A)	(B)	(C)
Gross income component at personal level	% Of households having received an amount	% Of households with missing values (before imputation)	% Of households with partial information (before imputation)
Gross employee cash or near cash income	74	0	
Gross non-cash employee income	2	0	
Contributions to individual pensions schemes	4	0	
Gross cash benefits or losses from self-employment (including royalties)	10	0	
Gross regular pension from private schemes (other than those covered under ESSPROS)	3	0	
Gross unemployment benefits	6	0	
Gross old-age benefits	23	0	
Gross survivor` benefits	1	0	
Gross sickness benefits	9	0	
Gross disability benefits	13	0	
Education-related allowances	8	0	

Table 2.3.3.6.1 Number of observations and total item non-response.

	Number of sample observations	Number of sample observation no taken into account due to item non-response	Non-response at individual level (if applicable)	Non response at household level
At-risk-of-poverty rate by gender				
Males	7743			
Females	7565			
At-risk-of-poverty rate by age				
Under 25 years	5585			
25-34 years	1967			
35-44 years	2342			
45-54 years	2302			
55-64 years	1569			
65 years and over	1543			
At-risk-of-poverty rate by age and gender				
Under 25 years, males	2935			
Under 25 years, females	2650			
25-34 years, males	970			
25-34 years, females	997			
35-44 years, males	1133			
35-44 years, females	1209			
45-54 years, males	1176			
45-54 years, females	1126			
55-64 years, males	796			
55-64 years, females	773			
65 years and over, males	733			
65 years and over, females	810			
At-risk-of-poverty rate by gender and main activity				
Employed, male	3870			
Employed, female	3281			
Unemployed, male	112			
Unemployed, female	78			
Other inactive, male	3591			
Other inactive, female	4038			
Employed, all	7151			
Unemployed, all	190			
Other inactive, all	7629			
Mixed activity+missing	320			
At risk-of-poverty rateby tenure status				
Owner or rent free	13376			
Tenant	1875			
Missing	62			

At-risk-of-poverty rate by household type				
One person, under 64 years	959			
One person, 65 years and over	365			
One person, male	627			
One person, female	697			
One person households, total	1324			
Two adults under 65 years, no dependent children	2933			
Two adults, other, no dependent children	798			
Other households without dependent children	1704			
Single parent households with dependent children	491			
Two adults, one dependent child	1346			
Two adults, two dependent children	2579			
Two adults, three or more dependent children	1486			
Other households with dependent children	2644			
Households without dependent children	8546			
Households with dependent children	6767			
Missing	8			
At-risk-of-poverty rate by threshold (illustrative values)				
One person household	1324			
Two adults and two children-household	13981			

2.4 Mode of data collection

Table 2.4.1. Distribution of household members aged 16 and over by 'RB250'. Total

Household members 16+ (RB245=1 to 3)										
	Total	11	12	13	21	22	23	31	32	33
Total	11719	0	0	11567	2	0	67	18	0	65
%	100			98.7	0	0	0.6	0.16	0	0.6

Household members 16+ (RB245=2)										
	Total	11	12	13	21	22	23	31	32	33
Selected respondent	5852	0	0	5852	0	0	0	0	0	0
%	100			100						

Household members 16+ (RB245=3)										
	Total	11	12	13	21	22	23	31	32	33
Non-selected respondent	5867	0	0	5715	2	0	67	18	0	65
%	100			97.4	0.03	0	1	0.3	0	1.1

Table 2.4.1a. Distribution of household members aged 16 and over by 'RB250', RB245=1 to 3.

Rotational group	Total	RB250=13	RB250=21	RB250=23	RB250=31	RB250=33
1	1451	1440		9	1	1
2	1440	1428		6	1	5
3	1425	1409	1	8	2	5
4	1469	1440		13	3	13
5	1477	1460		6	2	9
6	1504	1485		4	3	12
7	1455	1431		11	4	9
8	1498	1474	1	10	2	11

Table 2.4.1b. Distribution of household members aged 16 and over by 'RB250', RB250=2 and RB245=3.

Rotational group	RB245=2		RB245=3					
	Total	RB250=13	Total	RB250=13	RB250=21	2RB259=3	RB250=31	RB250=33
1	727	727	724	713		9	1	1
2	730	730	710	698		6	1	5
3	746	746	679	663	1	8	2	5
4	740	740	729	700		13	3	13
5	736	736	741	724		6	2	9
6	730	730	774	755		4	3	12
7	716	716	739	715		11	4	9
8	727	727	771	747	1	10	2	11

Table 2.4.2 Distribution of household members aged 16 and over by 'RB260'. Total.

Household members 16+ (RB245=1 to 3 and RB250=11 or 13)							
	Total	1	2	3	4	5	Missing
Total	11561	0	57	7154	0	4350	6
%	100	0	0.5	62	0	38	0

Household members 16+ (RB245=2 and RB250=11 or 13)							
	Total	1	2	3	4	5	Missing
Selected respondent	5846	0	41	5805	0	0	6
%	100	0	0.7	99.3	0	0	0

Household members 16+ (RB245=3 and RB250=11 or 13)							
	Total	1	2	3	4	5	Missing
Non-selected respondent	5715	0	16	1349	0	4350	6
%	100	0	0.3	23.6	0	76.1	0

Table 2.4.2a. Distribution of household members aged 16 and over by 'RB260', RB245=1 to 3 and RB250=11 or 13.

Rotational group	Total	RB260=2	RB260=3	RB260=5	Missing
1	1440	4	864	572	
2	1428	6	862	560	2
3	1407	3	882	522	2
4	1440	10	878	552	
5	1459	14	892	553	1
6	1485	2	924	559	
7	1430	8	920	502	1
8	1472	10	932	530	2

Table 2.4.2b. Distribution of household members aged 16 and over by 'RB260', RB245=2 and RB250=11 or 13.

Rotational group	Total	RB260=2	RB260=3	RB260=5	Missing
1	727	2	725		
2	730	5	725		2
3	744	3	741		2
4	740	7	733		
5	735	10	725		1
6	730	1	729		
7	715	6	709		
8	725	7	718		2

Table 2.4.2c. Distribution of household members aged 16 and over by 'RB260', RB245= 3 and RB250=11 or 13.

Rotational group	Total	RB260=2	RB260=3	RB260=5	Missing
1	713	2	139	572	
2	698	1	137	560	2
3	663		141	522	2
4	700	3	145	552	
5	724	4	167	553	1
6	755	1	195	559	
7	715	2	211	502	1
8	747	3	214	530	2

2.5 Interview duration

The total average interview length was approximately 21,6 minutes³, which is significantly less than estimated in advance. There are two possible reasons that might contribute to an explanation of this. One is the large proportion of proxy interviewing in our survey. Though the aim was to interview each single household member about their employment status, only 28,8 percent of the household members answered these questions themselves. In 71,2 percent of the cases, these questions were answered by another member of the household (in most cases the selected respondent). The other reason is that the interview length for respondents who had been interviewed in the preceding longitudinal survey was a bit shorter than for new respondents. This is partly due to the fact that we could use information from former

³ Average estimated by excluding all recorded interviews lasting less than 5 and more than 120 minutes. Recording of interview time may be disturbed if the interviewer either forgets to close the electronic questionnaire, or opens it after completing the interview to make corrections.

interviews and just check them instead of asking the whole question, and partly because of the "training effect" repeated interviews has on both respondents and interviewers.

¹ Average estimated by excluding all recorded interviews lasting less than 5 and more than 120 minutes. Recording of interview time may be disturbed if the interviewer either forgets to close the electronic questionnaire, or opens it after completing the interview to make corrections.

3. Comparability

3.1 Basic concepts and definitions

The reference population

The reference population is persons aged 16 years or more at December 31 2002 who are living outside an institution.

The private household definition

A private household is defined as individuals that share food, meaning that they either do not pay for their food or that they share expenses for food. The definition does not require that they eat at the same times or that they are related.

The household membership

Persons will be considered as household members if they spend most of their nights at the address of the household.

1. A spouse/cohabitant registered at the household address but is absent from the dwelling because of work, education or conscription is still considered a member of the household. In case the spouse/cohabitant have moved from the dwelling but juridical still owns (part of) the dwelling is not considered as a member of the household.
2. Persons aged 18 years and more who are absent because of education are considered members of the household if they spend minimum 4 days a week at the address of the household.
3. Persons aged 17 years and younger who are absent because of education are considered as members of the household.
4. Persons temporary absent from dwelling for less than 6 months are not considered as permanent residents unless they do not have a private address elsewhere.
5. Persons in institutions (including children) and in private care are considered as living permanently at their place of residence if the stay exceeds 6 months. Individuals admitted to hospitals or imprisoned are considered as permanent residents where they had their last place of permanent residency.
6. Persons in conscription service are members of the household that they were members of before the conscription.

The income reference period

The income reference period is the calendar year 2002.

The period for taxes on income and social insurance contributions

The period for taxes on income and social insurance contributions is the calendar year 2002.

The reference period for taxes on wealth

The reference period for taxes on wealth is the calendar year 2002.

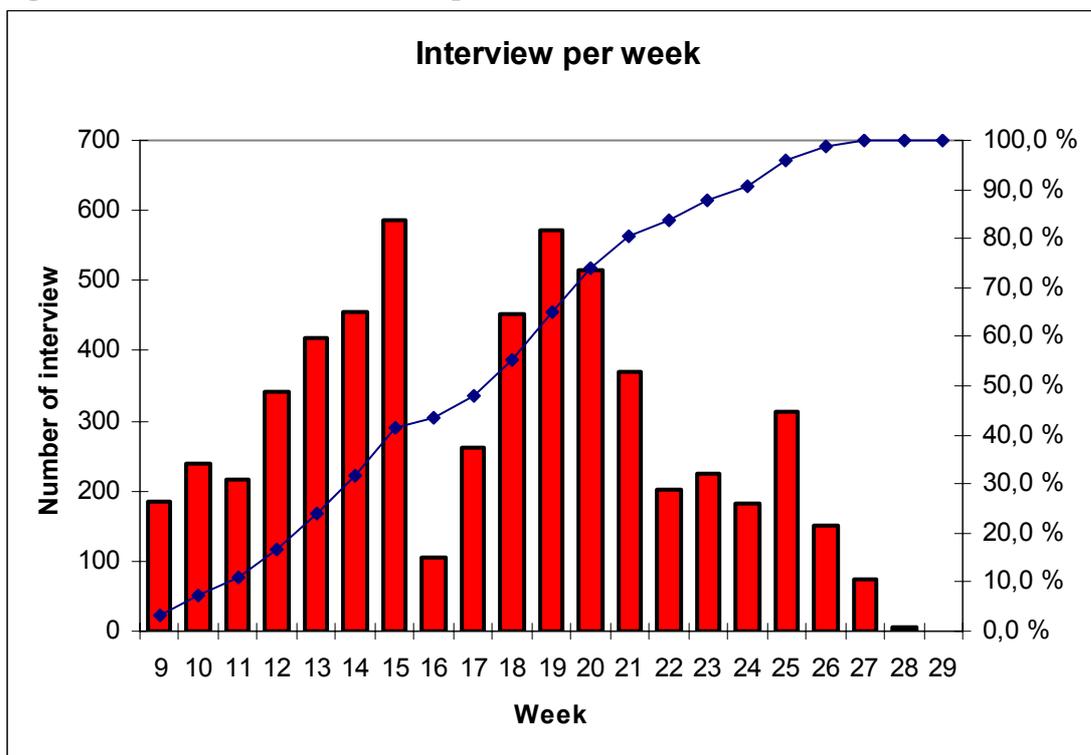
The lag between the income reference period and current variables

The income variables are collected from registers and the interval between the end of the income reference period and the time of interview for current variables is maximum 7 months.

The total duration of the data collection of the sample

The interviews were carried out starting 24 February and ending 15 July. Figure 3.1 shows the number of interviews conducted each week of the data collection period. Easter was in Week 16 and 17, hence the smaller number of interviews.

Figure 3.1 Number of interviews per week.



Basic information on activity status during the income reference period

The most frequent activity status is the status that individuals declare to have occupied for at least 7 months in the calendar year 2002. The following breakdowns are considered by total. Table 3.1 shows that the most frequent activity status is "employed" then "other inactive" and "mixed activity", "unemployed" is the smallest group on 1 percent.

Table 3.1. The most frequent activity status. Total.

Activity status	Percent	Frequency
Employed	46	4851
Unemployed	1	135
Other inactive	30	3136
Mixed activity	24	2508

3. 2. Components of income

3.2.1 Differences between the national definitions and standard EU-SILC definitions, and an assessment of the consequences of the differences mentioned will be reported for the following target variables.

This section gives an overview of how income data from registers have been organised in order to be comparable to the income concepts outlined in the SILC guidelines. In addition references are made to any departures from these guidelines.

All income data derived from registers are recorded gross at component level. All income data are collected at the individual level (i.e. the person registered as the receiver of the income). This also concerns typically 'household' related incomes such as housing benefits and social assistance. Register data also includes the income of children aged 13-16 years at the individual level. The income of children aged 12 or younger are, however, included in their parent's income (e.g. interest received).

Total household gross income (HY010):

The sum of all income components: HY040G+HY050G+HY060G
HY070G+HY080G+HY090G plus the sum for all household members of:
PY010G+PY020G+PY050G+PY090G+PY100G+PY110G+PY120G+PY130G+PY140G.
A few comments: PY070g is considered as included in PY050G. HY110G is included in
PY010G. HY030G (imputed rent) is not calculated. Hence HY100G (interest on mortgage)
has not been deducted when calculating HY010.

Total disposable household income (HY020):

Defined as Total gross income minus (HY100G+HY130G+HY140G).
HY120G (regular taxes on wealth) is included in HY140G

Total disposable household income before social transfers except old-age and survivor's benefits (HY022)

Defined as HY020 minus the sum for all household members of:
(PY090N+PY120N+PY130N+PY140N) + HY050N+HY060N+HY070N

Total disposable household income before social transfers including old-age and survivor's benefits (HY023)

Defined as HY020 minus the sum for all household members of:
(PY090N+PY100N+PY110N+PY120N+PY130N+PY140N) + HY050N+HY060N+HY070N

Income from rental of property or land (HY040):

Defined as net income from hiring out property

Family/children-related allowances (HY050)

Includes the following income components:

- family allowance
- maternity allowance (birth grant)
- cash-for-care benefit
- child support for single parents (childcare and education)
- transitional benefit for single parents

Deviation from the SILC concept:

For some employees maternity allowances are included in the wages and cannot be separated out.

Social assistance (HY060):

Includes the total amount received in social assistance (benefits and loans).

Housing allowances (HY070):

Includes dwelling support in cash to renters and owner-occupiers.

Deviation from SILC concept:

The benefit from renting a subsidised dwelling is not included in the income concept.

Regular inter-household cash transfers received - (HY080)

Includes alimonies received from former spouse. Information on regular private cash support received by children from parents living in a separate household (e.g. students) is included from interview.

Interest, dividends, profit from capital investment in unincorporated business (HY090):

Interest and dividends are taxable income. In addition some minor incomes from property are included, for instance profit from life insurance.

Regular taxes on wealth (HY120):

Included in HY140: Total tax on income.

Regular inter-household cash transfers paid (HY130):

Includes paid maintenance to children and former spouse (alimony). These payments appear as deductions in the tax return. Information on regular private cash support from parents to children living in a separate household (e.g. students) is included from interview.

Total Tax on income and social contribution (HY140):

Includes assessed income and wealth taxes and social contributions.

Deviation from SILC concept:

This variable includes both income and wealth taxes. It is difficult to specify income or wealth taxes in tax files because all taxes are recorded *net*, after special tax deductions (e.g. parent's tax deduction, special tax deductions for residents of Finnmark etc.).

Gross Employee Cash income (PY010):

Defined as the sum of all taxable wages and salaries including overtime, holiday pay, tips and bonuses. The wage concept also includes non-cash income such as free telephone and newspapers, low-interest loans etc. However, company car is not included in the cash wage concept.

Deviation from the SILC concept:

- payments to foster parents (included in wages, cannot be separated from wages)
- severance and termination pay (----- "-----)
- sickness benefit received after 15 days or more of sickness (-----"-----)
- fringe benefits other than company car (included in the wage concept).

With the exception of sickness payments these deviations from the SILC definition are expected to be of a minor importance.

Gross cash losses from self-employment (PY060):

Entrepreneurial income is collected *net* in register data. Gross cash losses thus appear as negative amounts in variable PY050: Gross cash profit.

Non-cash Income from self-employment - value of own goods for own consumption (PY070):

The tax-assessed benefit from consuming own goods (estimated by the tax authorities) is included in Gross cash income from self-employment.

Unemployment benefits (PY090):

Includes unemployment benefit for employees and unemployment benefit for the self-employed.

Deviation from SILC concept:

No information available on benefit (in-kind) related to vocational training.

Old-age function (PY100):

Includes old-age pension from the social security system and occupational pensions.

Deviation from SILC concept:

It was not possible to split occupational pensions, i.e. social insurance benefits from employers scheme, into different types of beneficiaries, e.g. old-age pensioners, disabled or survivors. Instead all types of occupational pensions have been included under the old-age function.

Survivors' function (PY110):

Includes survivors' pension from the National Insurance. In addition several minor income items have been included that are received mainly by survivors, e.g. tax-free wage income and holiday pay earned by the deceased.

Deviation from SILC concept:

Not possible to include funeral grant in the income concept. This benefit is transferred directly to the firm of undertakers.

Social benefits in the sickness (PY120):

All sickness benefits are included in wages and salaries and cannot be specified in registers.

Invalidity benefits (PY130):

Includes disability pension from the National Insurance, early retirement pension (AFP), basic and additional benefits and compensation for occupational injuries.

Education related allowance (PY140):

Includes scholarship from the State Educational Loan Fund.

3.2.1. Difference between the national definition and standard EU-SILC definition.

For 2002 there are only minor differences in the amount of total income and disposable (after-tax) income based on national definitions and the corresponding figures based on SILC definitions. As is shown in table 1, the difference amounted to only 1 billion NOK for both income concepts.

One main difference that exists is the treatment of holding gains or capital gains. In 2002 this income item amounted to a negative value of roughly 6 billion NOK in Norway. Capital gains (or losses) are, however, not included in the SILC definition of income but is included in the national definition.

In addition to capital gains the national definition also includes some other income components that are not part of the SILC definition. This is, for instance other non-cash employee income except for a company car (e.g. free newspapers, telephone, company shares etc.) and regular pension from private schemes (SILC variable PY080G). In total these income components amounted to roughly 7 billion NOK in 2002.

Table 3.2.1.1

Total gross income and disposable income. Billion NOK. 2002

	SILC-Norway definition	National definition	Difference
Total Gross income	939,3	940,3	1,0
Disposable income ¹	706,6	705,6	1,0

¹ In the national definition this income concept refers to 'After-tax income'.

In addition there are differences between national practice and SILC in income definitions at the component level, although these differences have almost no impact on total income and disposable income. In the definition of employee income (wages and salaries) the national definition for example includes sickness benefit, while in the SILC definition this component is considered part of transfers. For self-employment income sickness benefit is again included in the national definition, but not in the SILC definition. Regarding property income the main difference lies in the aforementioned inclusion of capital gains in the national definition. In addition, regular pension from private schemes are part of private pensions in the national definition (i.e. transfers received), but not considered part of income in SILC. Finally, the difference in sum of total transfers received between the two sources can also be explained by different treatment of sickness benefits (part of transfers in SILC, part of employment income in national definition).

Table 2

Comparison of income components. The national definition and EU-SILC. Billion NOK. 2002

Income component	SILC-Norway	National definition
Employee income	586,9	609,1
Self-employment income	54,0	55,7
Property income	79,7	73,8
Transfers received	218,7	201,7
Total income	939,3	940,3
Taxes and negative transfers	232,7	234,8
Disposable (after-tax) income	706,6	705,6

3.2.2. The source or procedure used for the collection of income variables

In order to construct total household income and disposable income data on income have been collected from several administrative registers. In SILC the following data sources have been used:

(a) Tax Return Register

(Employee and self-employment income, property income, taxable pensions and benefits)

(b) Tax Register for Personal Tax Payers

(Taxes on income and wealth, social security contributions)

(c) Register for end-of-the-year certificates

(Unemployment benefits, company car, early retirement pension)

(d) The State Housing Bank

(Housing allowances)

(e) The State Educational Loan Fund

(Education related benefits)

(f) National Insurance Administration

(Old-age and disability pension, survivor's benefit, family related allowances)

(g) Social statistics

(Social assistance)

A comprehensive data file on income is established by linking the total resident population to all the different income registers. The key that links the individual to the registers is the Personal Identification Number.

3.2.3. The form in which income variables at component level have been obtained

The register data only report gross income at component level. Total assessed taxes and contributions to social security are collected separately from tax registers.

3.2.4. The method used for obtaining income target variables in the required form (i.e. as gross values)

All income data are recorded gross at component level.

4. COHERENCE

4.1. Comparison of income target variables and number of persons who receive income from each 'income component', with external sources

With the exception of inter-household transfers all the income data in SILC are from register. Hence, in our opinion, there is no point in comparing the results from SILC-Norway with external sources since the source we would compare with is the source used in SILC-Norway. In 3.2.1. we compared with national definitions. If we compare SILC-Norway with information from register using SILC-definitions we will only measure the effects of non-response that are not corrected through weighting.

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